

Jan. 29, 1929.

1,700,168

C. H. KLEIN ET AL
CABLE CLAMP AND BRIDLE RING

Filed Dec. 15, 1926

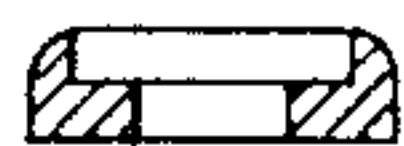


Fig. 3

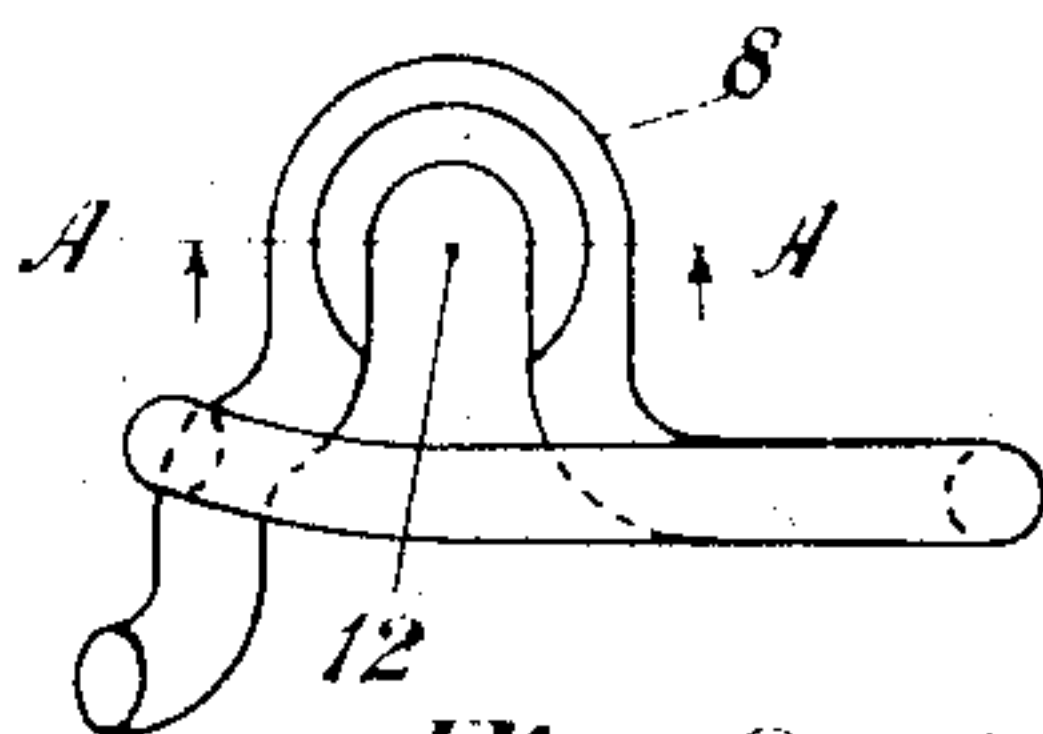


Fig. 2

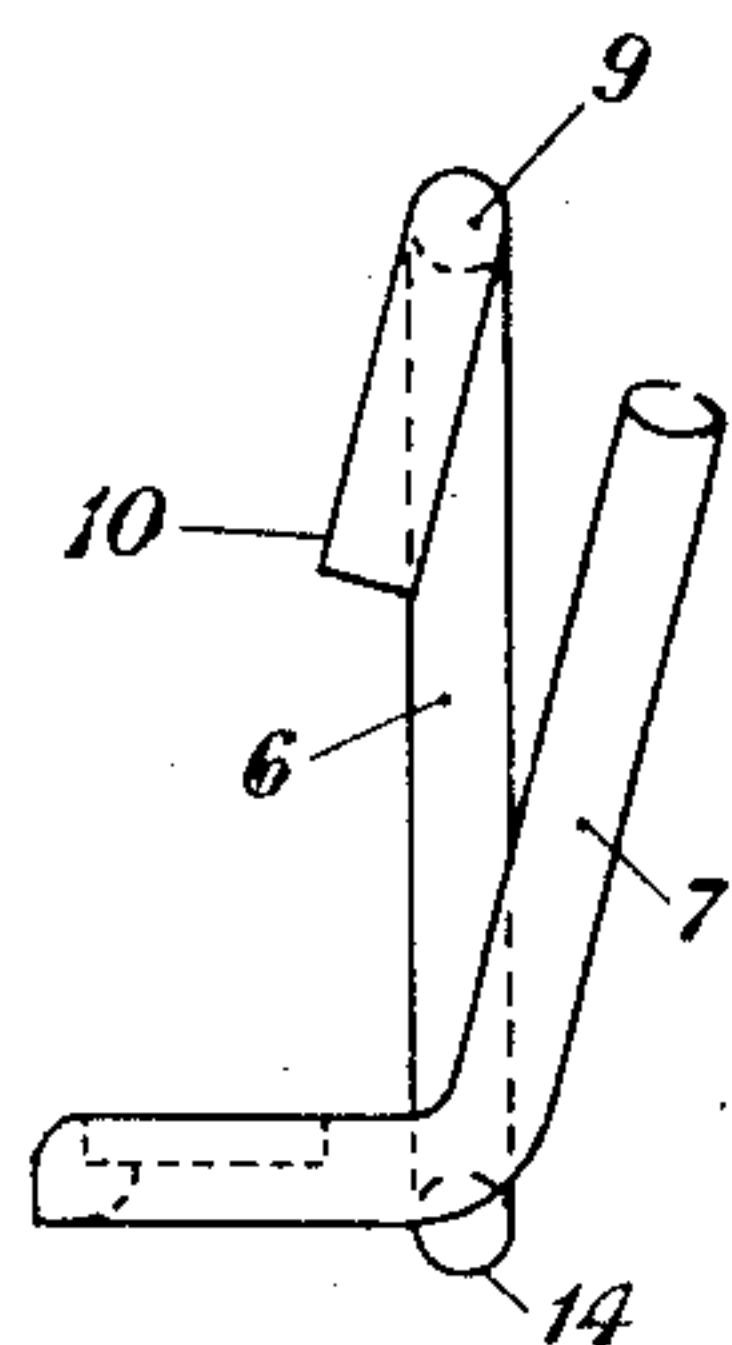


Fig. 4

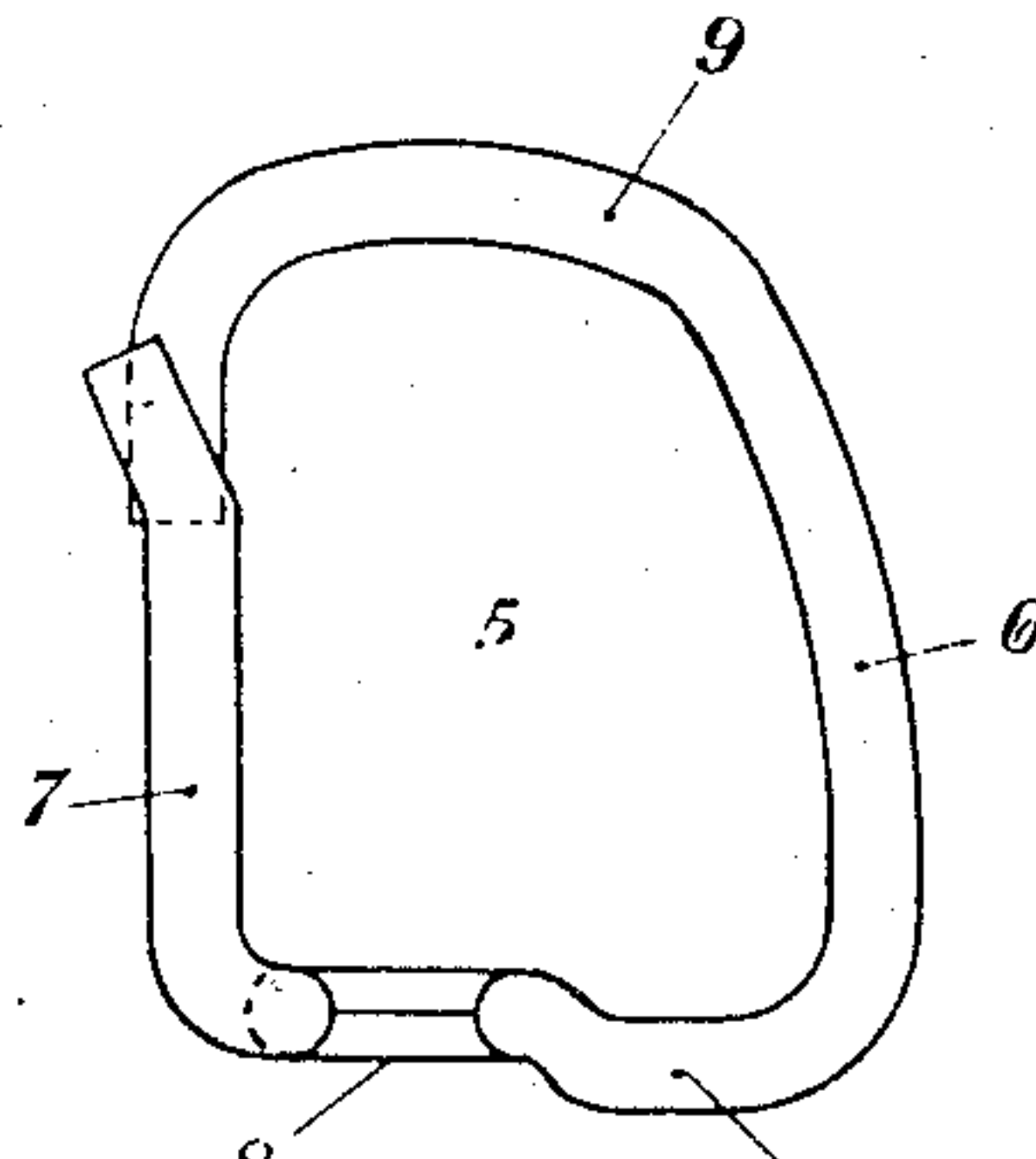


Fig. 1

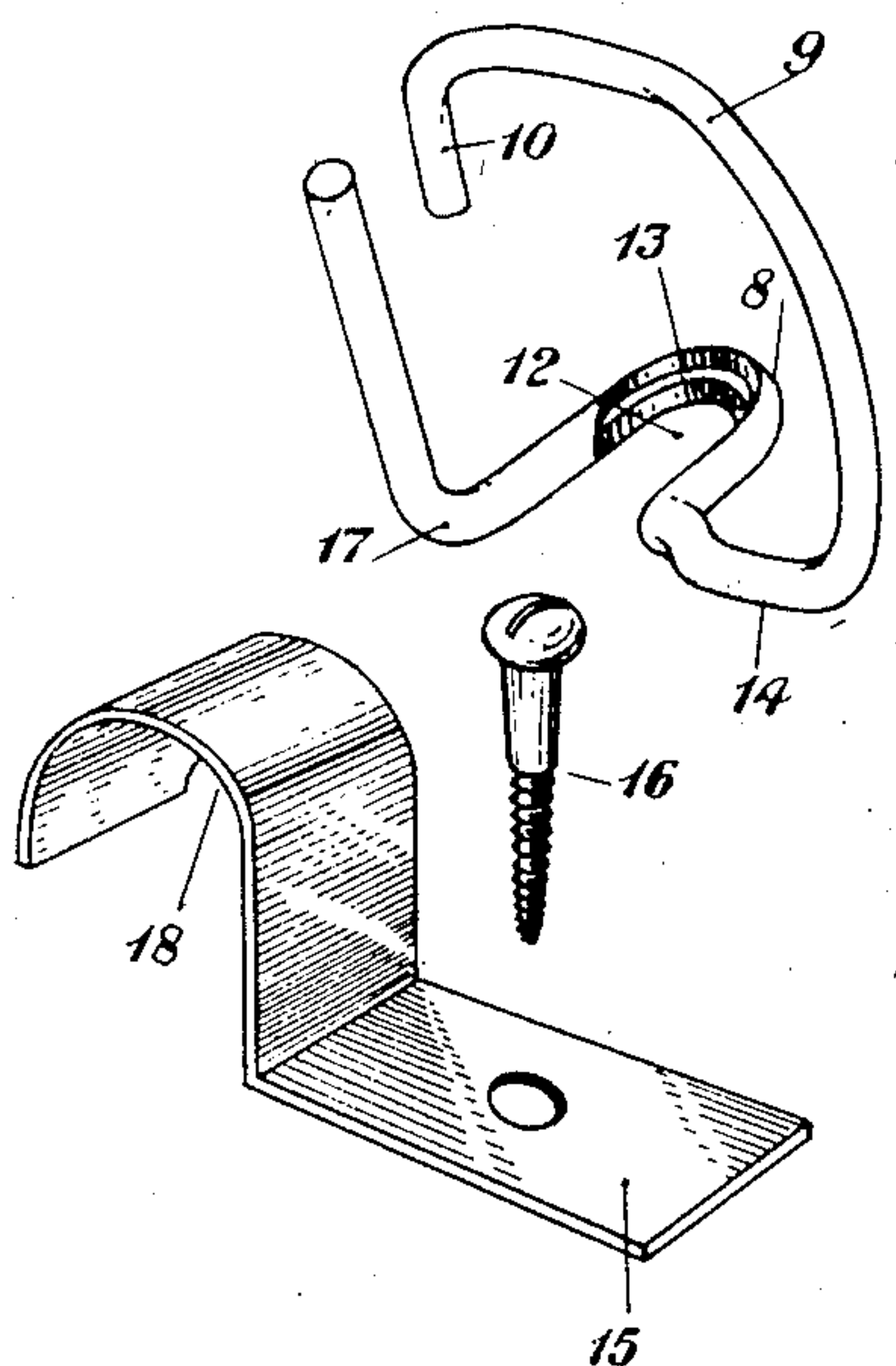


Fig. 8

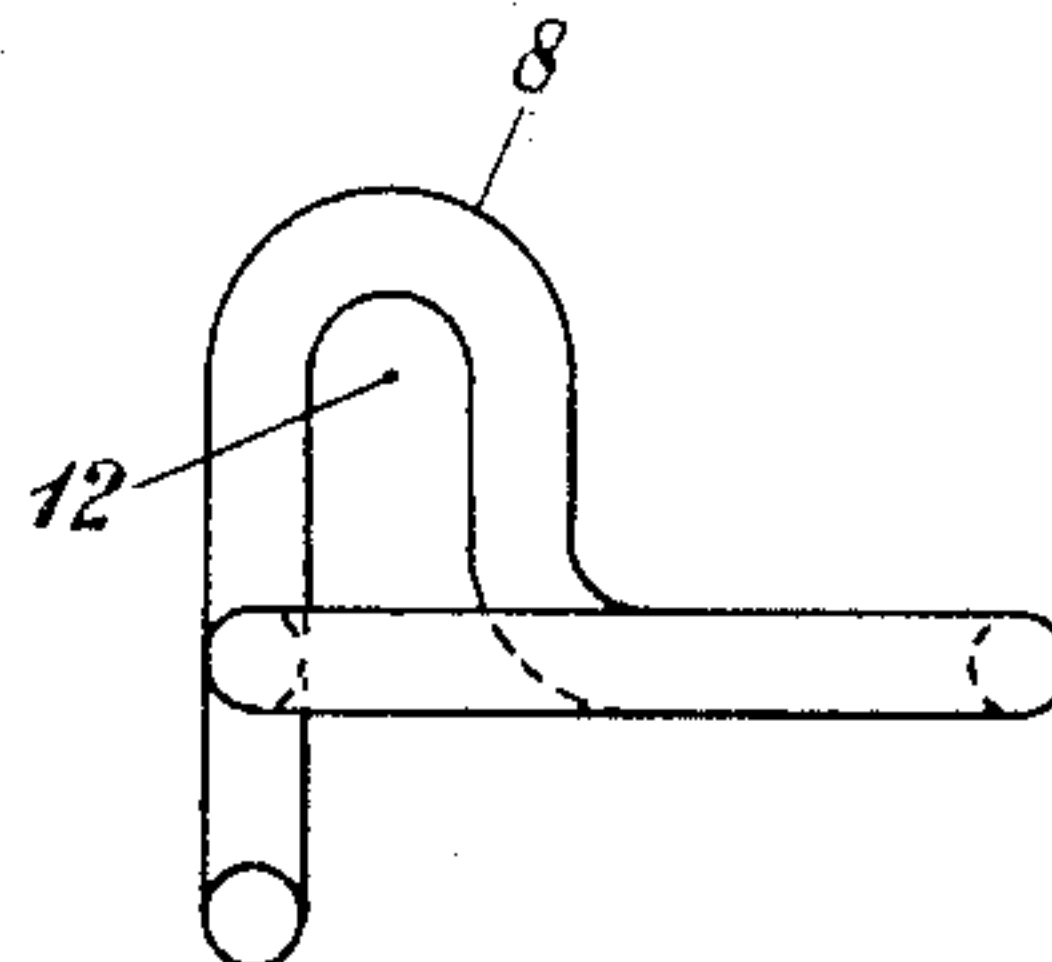


Fig. 6

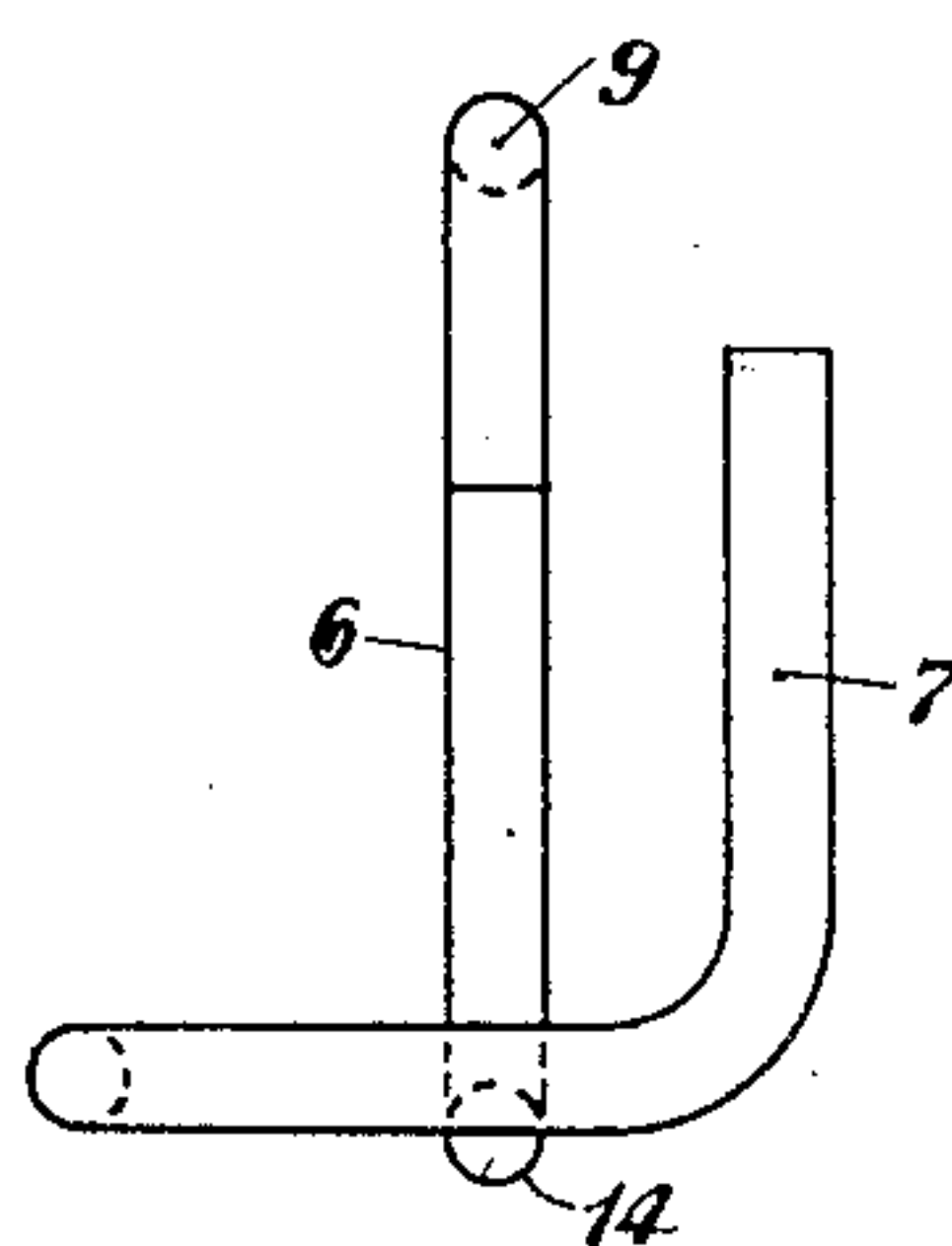


Fig. 7

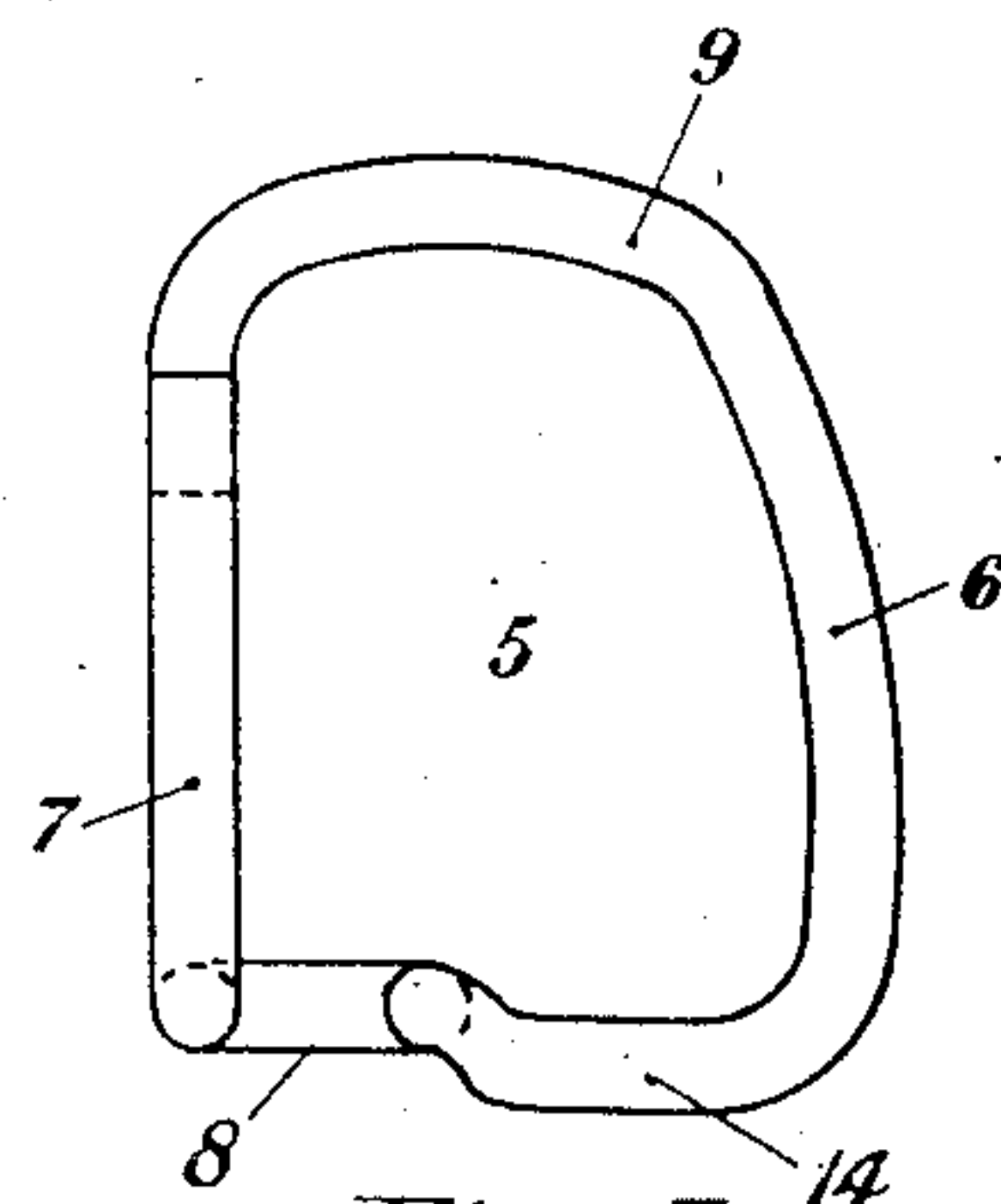


Fig. 5

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CABLE CLAMP AND BRIDLE RING.

Application filed December 15, 1926. Serial No. 155,044.

This invention relates to devices for hanging or supporting electric cables and wires along the faces of walls, ceilings, fences, or the like.

5 An object of the invention is to provide a simple, inexpensive and efficient arrangement of the above character which possesses advantages over those which have been previously used.

10 Other and further objects of the invention will be apparent from the following description when considered in connection with the accompanying drawing, in which certain embodiments thereof are illustrated.

15 In the drawing, in which like characters of reference designate like parts throughout, Figure 1 is a side elevation of an improved bridle ring; Fig. 2 is a top plan view thereof; Fig. 3 is a section taken on the line A—A
20 of Fig. 2 looking in the direction of the arrows; Fig. 4 is an end view of Fig. 1; Fig. 5 is a modification of the arrangement shown in Fig. 1; Fig. 6 is a top plan view of Fig. 5; Fig. 7 is an end view of Fig. 5; and Fig.
25 8 is a perspective view in exploded position of the bridle ring and cable clamp with which it is adapted to be associated.

In practice, it is often necessary, after the mounting of the cable upon a supporting
30 surface to which it is secured by means of a cable clamp, to string additional loose bridle wires parallel to the cable. These wires are usually supported upon bridle rings, and by the present invention the rings
35 may be used separately for this purpose or in combination with cable clamps, to which they may be attached.

Referring to the drawing, numeral 5 represents a ring which is composed of a single
40 piece of steel wire. In the present instance, for the purpose of illustration, it is bent in substantially rectangular shape, although other shapes may be used. A pair of arms 6 and 7 extend in parallel relation from a
45 base 8. The arm 6 has a bent portion 9 which extends at right angles therefrom and terminates in a hooked end 10, which overlaps the end of the arm 7 in such manner that a space is provided between the two
50 ends, through which wires may be inserted within the confines of the ring. In Figs. 1 to 4, inclusive, the end of the arm 7 is turned outwardly, and in Figs. 5 to 8, inclusive, the end assumes a position parallel

to the arm 6. The space or opening pro- 55
vided between the ends of the arms 6 and 7 will be at the front of the ring when it is in position, so that additional wires may be readily inserted through said opening. The
base 8 of the ring 5 is provided with a 60
semi-circular turn or throat 12, and forms a plane at right angles to the plane of the ring. The wire in the throat 12 has a somewhat flattened upper portion in order to
provide a better seating for the enlarged 65
head of a hammer-drive anchor, screw, nail, bolt or toggle by which it is secured to a wall. A counterbored portion 13 may be
provided, if desired, around the center of 70
the throat 12 so that if the screw or other attaching means becomes loosened, the ring
will not be so likely to become detached. The base 8 and the arm 6 of the ring are
so shaped that when the ring is mounted 75
on a vertical surface the wires are brought close to the mounting surface and away from
the opening in the ring, so that the wires are more protected than in former types of
rings. A shoulder 14 extends forwardly 80
from one side of the base 13 and extends in a plane beneath said base and connects with
the lower end of the arm 6.

The bridle ring is adapted to be used independently or in combination with any
85 form of supporting plate or cable clamp. In its independent use it may be attached to a wall or ceiling in a vertical or horizontal position. The ring is shankless, thereby
permitting its use on all surfaces by using 90
standard attaching devices. The comparatively wide throat 12 permits the ring 5 to be installed after the attaching device is placed and almost driven home. The use
of the counterbored portion 13 locks the head 95
of the attaching device so that the ring will not fall off even if the attaching device is loosened slightly. This permits rapid installation, especially when installing on
hammer-drive anchors, screws, or the like 100
already driven and holding cable clamps. In this case, the hammer-drive anchor or screw is partially withdrawn, the ring inserted and the hammer-drive anchor or screw is tightened again. A common form
of supporting plate or clamp with which the 105
ring 5 is adapted to be used is shown in Fig. 8 for the purpose of illustration. When there is need for additional wires to be

strung, the bridle ring 5 may be attached to the clamp by loosening the screw 16 which secures the clamp to its supporting surface and slipping the bridle ring under the enlarged head of the screw. The screw may be then tightened so that both the clamp and bridle ring are securely fastened to the supporting surface, as will appear below. The clamp 15 is shown as having an opening through which the screw passes to be inserted in the supporting wall so that it passes through the aligned openings and secures the ring and supporting plate or clamp together against the surface upon which they are to be mounted. When thus mounted with the enlarged head of the screw seated in the counterbored portion of the throat, the ring is locked and prevented from rotating. The rotation of the ring is also prevented by the engagement of the portion of the ring extending from the shoulder 17 to the throat portion 12 with the flat side of the hooked portion 18 of the cable clamp. The shoulder portion 14, which extends beneath the plane of the base portion 8 of the ring, engages the edge of the flat portion of the cable clamp 15 and prevents the rotation of the ring in the opposite direction. Thus, when the ring is seated on the supporting plate or cable clamp, rotation thereof is prevented in one direction by the contact of the portion extending from the shoulder 17 to the throat with the flat face of the hooked portion 18, and in the opposite direction by the contact of the shoulder 14 with the edge of the plate 15.

When the ring 5 is used independently the screw or other securing means, with the enlarged head seated on the base portion 8, securely locks the ring to the supporting sur-

face. This action is brought about by the pressure exerted by the shoulder 14 on the supporting surface.

It will be obvious that the general principles herein disclosed may be embodied in many other organizations widely different from those illustrated without departing from the spirit of the invention as defined in the following claim.

What is claimed is:

A bridle ring comprising a single piece of wire bent in substantially rectangular shape and having arms extending substantially parallel with each other for a certain distance, one of said arms being thereafter turned at right angles and forming a hook, the end of which overlaps the end of the other arm with an intervening space therebetween through which wires may be inserted within the confines of said ring, a substantially semi-circular base having a counterbored upper portion and a somewhat flattened lower portion, extensions projecting forwardly from said base, one of said extensions being connected to one of said arms, a shoulder portion connecting the other arm and extension, said shoulder lying in a plane beneath said base and extending in a direction at right angles thereto, and an enlarged head seated on said counterbored portion to secure the bridle ring to a supporting wall said enlarged head cooperating with said base to cause said shoulder portion to exert uneven pressure on the supporting wall to prevent the rotation of the bridle ring.

In testimony whereof, we have signed our names to this specification this 14th day of December 1926.

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